## HELIX HORTENSIS.


Gharacter Genericus.
Animal Limax.
Tefta univalvis, fpiralis, fubdiaphana, fragilis. Apertura coarctata, intus lunata, f. fubrotunda: fegmento circulo dempto.

Lin. Syft. Nat. p. 1241.
Character Specificus, Goc.
HELIX tefta imperforata pallida, fafciis latis interruptis fufcis.
COCHLEA vulgaris major pulla maculata et fafciata hortenfis.

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\text { Lifl. Angl. tab. 2. fig. } 2 .
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## AN HELIX LUCORUM?

Lin.

Militat omnis amans, et habet fua caftra Cupido:
Attice, crede mihi ; militat omnis amans.
Ov.

Helix vulgaris, feu ut communiter vocatur, Cochlea, in numero eft animalium quæ ob vilitatem, formamque fordidam et abjectam, a plerifque contemni et negligi folent; in quibus tamen plura fortaffe dif-
cernere potelt phyficus quie delectationem admirationempue excitent, quam vel in majoribus animalibus. Cochlearm enim anatome adco miraculis plena eft, ut de variis illarum partibus integrum volumen poffet componi. Cum vero longis ambagibus fpeciatim has minutias deferibere lectoribus plurimis moleftum fit, loreviter tantum illa percurrenus memoratu digniffima. Oculi Cochlarum in fummitatibus duorum longrorum tentaculortim, feu ut vulgo vocantur, cornum fiti funt: quod licet a quibuflan phyficis dubitatum fit, ab experimentis tamon et accuratiflimis Swammerdamii inveftigationibus clace confirmatur: probatur quoque cos cofdem fenc humores, tunicas, et vafa, quibus animatium majorum oculi inftrumtur, continere. Non defuere pui Cochlearum comua pro veris telefoopiis maturalibus habucrunt, aflerucruntque poffe illas ca wel exicudere vel contrahere pro diftantia objecti ad quod oculos direxerint. Hac autem idea fructusam magis multimodam arguit, quam revera his organis tribuit Natura, et fortalle inter plurimas fit hae hypothelis, quas ingenio fuo indulgere folent nomulli Natura fpeculatores.

Dentes Cochlea funt validi et acuti ; omnefque corporis partes tam interiones quam exteriores ad animalis iftius mores habitufque egregic accommodautur.

De miro genérandi modo difurus, lectores meos enixe orem necelte eft ut nee me fabulas philofophicas fingere exiftiment, nee fidem fuam deficere et immimai finant.

Si quidem vera nobis referunt oculati Nature inter animalia inferion inveltigatones, Cochlearum amores
inufitato et fibi peculiari quodam more promoventur ; femperque ipfum complexum pracedit mira formula, qux pugnx fatarix faciem omnino exhibet.

Cochlea lafcivientes mutua vota telorum parvulorum ictibus, quae peracuta funt et quafi cornca, fibi invicem communicant; illifque refertam pharetram exiguam, in dextro latere cervicis fitan, quamdiu permanferit illis conjuntionis defiderium, intus geflant. Emiffo primo telo, illico refpondet Cochlea vulnerata, - fimile in amantem jaculatur; ab illa telum alterum emittitur, rurfufque ipfa invicem percutitur ; Cupidinifque fagitta, quas per omne ævum cecinit fervidum poctarum et amantium ingenium, in ipfa tandem Natura revera inveniuntur. Peracto hoc lepido pratio, cocunt Cochlex, et deinde locum idoneum ubi ova fua deponant follicite qureritant ; humidum nempe et opacum receflim, vel fubt terre gleba, vel cavo aliquo tegmine. Rotunda funt hac ova, magnitudine fere piforum parvulorum, coloris albi fubpellucentis, et fubftantix mollis. Ex his excluduntur Cochlex plene formate, teftas fuas in dorfo ferentes, nec ullam aliam mutationem proter naturale molis incrementum fubeunt. Hortis et pomariis damnum non leve inferre folent Cochlex, et notatu dignum eft, illas, fi defecerit cibus fucculentus, fructus nempe aut folia, corpora etiam dura et fieca rodere : memini cnim egomet Ilelicem hortenfem, (qualis eft illa quac hic depingitur,) fub vitro cujus diameter quatuor uncias fuperabat inclufam, fubftratam chartam communcin cervleam una nocte ufque ad ipfius vitri marginen devoraffe ; circulo relicto velut ab ipfo circino defignato.

Ab'cxperimentis Spallanzanii aliorumque probatur, Cochleas, abfciffa aliqua parte, repullulandi facultatem habere : ipfe enim Spallanzanius Cochlere caput abfcidit, quod, elapfo certo tempore perfecte regerminabat. Hujus experimenti veritas, licet a nonnullis denegetur, ab aliorum tamen doctiffimorum phyficorum teftimonio fatis comprobatur.

Quanquam variis intervallis fagittas fuas jaculentur Cochlex, fatendurn tamen eft tabulam reprefentare illas plus xequo a fe invicem remotas. Plerumque propius accedunt; immo interdum fit ut telum ipfum, gladii inftar, in corpore oppofito infixum ftet, dum Cochlea quæ jaculum cmiferit, recedit paululum, fagittam quafi commilitonis fui expectans.


## THE

## GARDEN SNAIL.


Generic Character.
The Animal a Slug.
Sbell fpiral, fub-pellucid.
Aperture femi-lunar.
Specific Character, $\mathcal{F i c}_{c}$.
SNAIL with a fhell of a pale colour, with broad interrupted bands of brown.

## The COMMON GARDEN SNAIL.

See to the fight the gentle warriors move, And dart with harmlefs force the fhafts of love!

The Snail is amongft the number of thofe animals which we are apt to overlook on account of their feemingly contemptible appearance, but which will perhaps open to our attentive furvey a greater variety of curious particularities than moft other creatures can exhibit. The anatomy of the fnail is full of wonders, and a volume might be written on its hiftory; but, without defcending to a tedious narrative of all its parts, I fhall only mention a few of the moft remarkable ones. The cyes of Snails are fituated on the tips of the two longeft horns, and though their exiffence has
has been queftioned by fome Naturalifts, yet the accurate refearch of Swammerdam has fufficiently proved their real nature, and that they are furnifhed with nearly the fame humours, coats, and veffels as in moft of the larger animals. Some authors have fuppofed the horns to be a kind of natural telefeopes, and that the animal fhortened or lengthened them according to the diftance of the objects to which it directed them; but this idea feems to imply a more complicated ftructure than can be found in this organ, and, I believe, muft be given up as one of thofe ingenious hypothefes which are too frejuently entertained by fpeculative enquirers.

The teeth of the Snail are fharp and ftrong, and all the internal as well as external parts of the creature are admirably calculated by Nature for the mode of life to which it is deftined.

But the moft wonderful part of the hiftory of the Snail, is its manner of breeding; and I muft requeft my readers to fummon all their philofophical faith to receive the furpriling particulars.

If the obfervations of the moft profound enquirers into the operations of Nature amongt the lower orders of animals may be depended upon, the amours of Snails are conducted in a manner very different from thofe of moll other creatures, and are always preceded by a very extraordinary ceremonial, which has all the appearance of a regular combat.

When thefe animals are difpofed to love, they fignify their mutual withes by launching feveral little darts at each other. Thefe darts are of a very fharp form, and of a horny fubftance, and the animals are provided
with a little quiver or efervoir of them during the breeding feafon: this imernal quiver or repolitory of the darts is fituated within the neek, and opens externally on the right lide. Upon the difeharge of the firt dart, the wounded suail immediately retaliates upon the aggreffor, and difcharges a dimilar one; the other again renews the battle, and is again in its furn wounded ; and thus the dares of Cupid, fo longs and londly celebrated by poets and lovers, and which are metaphorical with all the eft of the ereation, are here completely realized. When the animals have continued for fome time the combat jutt cleferibed, a reconciliation takes place, and they mite; atter which they are folicitous to depofit their eorgs in a place of falety. For this purpofe they choofe a moif, cool fitmation, generally under fome litele clod, or in fome fuall fhelteved cavity, in which they place them: they are perfectly round; about the fize of very finall peafe, of a femi-tranfparent white colour, and of a foft fublance: from the fe the young are hatched completely formed, and with their fhells on their backs, and undergo no father change than a gradual increale of fi\%e.

The depredations which thefe anmals commit in gardens and orchards is very confiderable, and it is renarkable that in defect of moill fucculent food, as fruit and tender leaves, they will even attack fubilances of a hard and dry nature. I have known the common garden Snail here figured, when confined for one nighe under a glafs of more than four inches in diameter, which was placed on a fleet of common blue paper, entirely devour the whole paper contained in the inclu-
ded fpace, to the very edge of the glafs, fo that a circular piece feemed almoft as accuratcly taken out, as if marked by a pair of compaffes.

From the experiments of Spallanzani and others, it appears that Snails are poffeffed of a very confiderable degree of reproductive power. Spallanzani in particular, has found that the whole head of a Snail may be cut off, and yet in a certain face of time will be reproduced. This has been denied by fome, but its truth is effablifhed by experiments conducted by the moft careful and accurate obfervers.

It is neceffary to add, that the Snails in the annexed plate, are reprefented at fomewhat too great a diftance from each other; this is a circumftance which admits of great variation, but in general the animals make a nearer approach before they dart their fpicula; and in fome particular inftances they have been known to approach fo near during this action, that the dart has been infixed in the manner of a fword, in which cafe the animal that difcharged it, withdraws again to fome little diftance, and feems to wait for a fimilar attack.

